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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,315	09/26/2003	Robert J. Sweeney	279.261US2	8396

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EXAMINER

GEDEON, BRIAN T

ART UNIT	PAPER NUMBER
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3766

MAIL DATE	DELIVERY MODE
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08/30/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/672,315	Applicant(s) SWEENEY ET AL.	
	Examiner Brian T. Gedeon	Art Unit 3766	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 5 July 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is in response to the amendment after Non-Final filed 5 July 2007.

Drawings

2. The Examiner acknowledges and accepts the new drawings submitted on 5 July 2007.

Specification

3. The Examiner acknowledges and accepts the amendments to the specification submitted on 5 July 2007.

Double Patenting

4. The Examiner has withdrawn the nonstatutory obviousness type double patenting rejection of claims 1-18 in view of the Terminal Disclaimer filed 5 July 2007.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-7 and 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snell et al. (US Patent no. 5,759,199) in view of Thompson et al. (US Patent no. 4,556,063).

In regard to claims 1, 2, and 11, in figure 2 of Snell et al. an implantable medical device 120 with an ambulatory interface unit 140 that uses a telemetry head 150 to communicate with the implantable device 120. Snell et al. teach that it is known in the prior art that information, pertaining to sensory data, may be transferred between the implantable device and the external device, col 6 lines 64-67. The implantable device can be in the form of a cardiac stimulating device, which is capable of sensing cardiac activity, col 8 lines 28-37. The telemetry head 150 is typically secured to the patient, which the Examiner interprets as being the point where receiving a signal from the implantable device at the skin surface. Wireless transmission of information, in a preferred embodiment, a digital instruction set is sent to a radio frequency protocol logic circuit which formats the digital instruction into a serial data stream which it then uses to modulate a carrier signal, col 9 lines 24-60 and col 10 lines 10-15, which the Examiner interprets as encompassing "encoding data." The transmitted data is then obtained by an external programmer/analyzer 40, which the Examiner interprets to be the external data logging device. However Snell et al. fail to describe the implantable medical device having a constant current source driven by an oscillator for producing a current signal modulated with encoded data between two electrodes adapted for internal disposition and contact with body fluids, the current signal causing corresponding modulated potential signals detectable at a skin surface. Thompson et al. describe a

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telemetry system for a medical device, col 1 lines 65-67 and col 2 lines 34-35, in which the implantable medical device that is driven by two constant current sources 28 and 30, col 4 lines 6-7. A radio frequency oscillator circuit 14 develops a carrier current signal; an antenna 16 allows the carrier signal to be externally transmitted from the implantable device implanted in a patient. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system described by Snell et al. with Thompson et al. because Thompson et al. describe an exemplary circuit, with the claimed elements, for wireless communication between an implantable medical device and external programmer.

In regard to claims 3-7 and 13-17, Snell et al. teach that transmission of data/information is encoded in a carrier signal, modulated by frequency or amplitude, and considers the modulation of the signal to be a matter of design choice, col 9 lines 25-31.

7. Claims 8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snell et al. (US Patent no. 5,759,199) in view of Thompson et al. (US Patent no. 4,556,063), further in view of Degonde et al. (US Patent no. 4,137,908).

In regard to claims 8 and 18, Snell et al. in view of Thompson et al. substantially describe the invention as claimed, except for injecting current between 2 electrodes in order to calculate a cardiac impedance value. Degonde et al. teach a method for observing cardiac rhythms by calculating variations of impedance values during heart contractions by injecting a known current between two electrodes, col 2 lines 1-17.

Therefore it would have been obvious to one of ordinary skill in the art at the time the

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invention was made to find cardiac impedance by the method claimed since Degonde et al. teaches that it is well known in the art to calculate the impedance in such a manner.

8. Claims 9, 10, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Snell et al. (US Patent no. 5,759,199 – hereinafter Snell '199) in view of Thompson et al. (US Patent no. 4,556,063), further in view of Snell (US Patent no. 5,792,204 – hereinafter Snell '204).

In regard to claims 9, 10, and 12, Snell '199 in view of Thompson et al. substantially describe the claimed except for the removable storage medium in the external device. Snell '204 shows an implantable medical device 30 in communication with a an external device 32 by means of telemetry circuitry 46 and 60, by which data regarding heart activity (e.g., IEGMs, etc) can be transmitted from the implantable device 30 to the external device 32, col 5 lines 1-13. The external device 32 contains memory for storing data, and a removable data storage unit, 64, in order to expedite exporting of data, col 5 lines 34-39. Therefore it would have been obvious to one of ordinary skill in the art to include a removable storage unit in order to expedite copying stored data, and/or viewing stored data on a display device.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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10. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian T. Gedeon whose telephone number is (571) 272-3447. The examiner can normally be reached on M-F 8:30-5:00.

12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela D. Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

CARL LAYNO
PRIMARY EXAMINER

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13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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BTG

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